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Observations of Comet Encke, made at the Radcliffe Observatory, Oxford.

(*Communicated by E. J. Stone, M.A., F.R.S., Radcliffe Observer.*)

The following observations were made by Mr. Robinson with the Barclay Equatoreal, using the Ring Micrometer, and a power of 100.

Date.	G.M.T.	Local Sidereal Time.	Observer.	Comet *minus* Star. (Corrected for Refraction only). R.A.	Comet *minus* Star. (Corrected for Refraction only). N.P.D.	No. of Comps.	Apparent R.A. of Comet.	Parallax in R.A. *p*	Log. (*p*×Δ)	Apparent N.P.D. of Comet.	Parallax in N.P.D. *q*	Log. (*q*×Δ)	Reference to Comp. Star.
1891.	h m s	h m s		m s	′ ″		h m s	s		° ′ ″	″		
Aug. 12	14 10 7	23 30 0	R.	+1 0·48	+3 10·69	9	4 37 46·92	−0·31	9·6254	57 23 31·9	−3·8	0·7116	(*a*)
Sept. 10	14 21 4	1 35 19	R.	+0 16·98	+7 8·84	9	7 49 59·08	−0·46	9·6382	56 57 2·0	−6·3	0·7765	(*b*)
	14 46 40	2 0 59	R.	−0 27·64	−5 39·44	6	7 50 8·67	−0·46	9·6378	56 57 30·5	−5·9	0·7519	(*c*)
30	16 40 8	5 13 37	R.	−0 45·67	+2 44·00	3	10 41 13·30	−0·39	9·5753	73 58 13·9	−6·6	0·8077	(*d*)
	16 56 24	5 29 55	R.	−0 23·57	+1 53·03	14	10 41 18·72	−0·38	9·5698	73 59 5·9	−6·5	0·8006	(*e*)
Oct. 4	16 27 27	5 16 40	R.	−1 32·60	−1 51·15	2	11 11 23·19	−0·37	9·5707	78 46 29·3	−6·6	0·8291	(*f*)
	16 27 27	5 16 40	R.	−1 48·12	−2 1·37	2	11 11 22·81	−0·37	9·5707	78 46 26·9	−6·6	0·8291	(*g*)
11	17 27 22	6 44 21	R.	−1 15·27	+9 26·93	1	12 2 51·19	−0·32	9·5556	87 38 53·9	−6·0	0·8362	(*h*)

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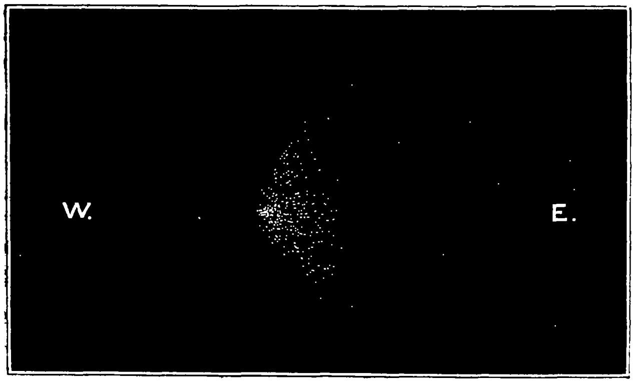
Assumed Places of Comparison Stars.

Comp. Star.	Mean R.A. 1891·0.	Reduction to App. R.A.	Mean N.P.D. 1891·0.	Reduction to App. N.P.D.	Authority.
	h m s	s	° ′ ″	″	
(*a*)	4 36 45·76	+0·68	57 20 23·3	−2·1	Mean of W.B. (2) IV. 750 and Grant 1138.
(*b*)	7 49 41·41	+0·69	56 49 52·9	+0·3	Radcliffe Transit-circle observation, 1891, Nov. 22.
(*c*)	7 50 35·62	+0·69	57 3 9·6	+0·3	Leiden A.G., Zone 259, No. 118.
(*d*)	10 41 58·57	+0·40	73 55 28·5	+1·5	Radcliffe Transit-circle observation, 1891, Nov. 22.
(*e*)	10 41 41·89	+0·40	73 57 11·4	+1·5	Radcliffe Transit-circle observation, 1891, Nov. 22.
(*f*)	11 12 55·83	+0·34	78 48 18·8	+1·6	Mean of Brussels 4659, and Grant 2914.
(*g*)	11 13 10·92	+0·34	78 48 26·7	+1·6	Mean of Brussels 4661, and Grant 2916.
(*h*)	12 4 6·17	+0·29	87 29 24·8	+2·2	Greenwich (1880), 1892.

Observer's Remarks.

1891, August 12.—The Comet's light is of the feeblest, requiring averted vision to render it visible. No nucleus seen. Centre of patch observed. Sky brilliantly clear.

September 10.—The Coma is fan-shaped, thus:—



The nucleus, which is just within the obtuse angle on the west side, is mag. 13·5.

September 30.—The nucleus is now fairly bright (say 11 mag.). The Coma is very similar in form to that of September 10, but strong twilight obliterated the fainter parts of the Comet.

October 4.—Comet and stars faint; altitude small; sky hazy. Observations made with considerable difficulty.

October 11.—Comet just visible in very strong twilight when stars below the 7th magnitude had disappeared from the field of view.

In the computation of the parallaxes the value 8″·85 has been adopted for the Sun's mean horizontal parallax, and the geocentric distances, Δ, have been taken from an ephemeris by Dr. O. Backlund, given in the *Astronomische Nachrichten*, No. 3048.

Radcliffe Observatory, Oxford:
1891 *December* 3.

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Observations of Comet Barnard 1891, *made at Sydney Observatory.*

(*Communicated by H. C. Russell, B.A., F.R.S., Government Astronomer.*)

This comet was found on October 9. It is a faint, round body with slight central condensation. The observations were made with the Filar Micrometer on the 11½-inch equatoreal, Mr. R. P. Sellars observing. Cloudy weather and then moonlight have prevented us from obtaining any observations since the 11th.

1891.	Syd. M. T.	Δ R.A.	Δ N.P.D.	cp.	RA. app.	log p. Δ	N.P.D. app.	log p. Δ	Red. ad l. app.		✳
	h m s	m s	′ ″		h m s		° ′ ″		s	″	
Oct. 9	13 52 24	+0 58·31	− 4 34·52	22	8 9 23·26	9·773*n*	126 34 52·53	0·462	+0·50	−16·71	1
9	16 2 51	−0 0·61	+ 5 17·99	15	8 10 0·09	9·626*n*	126 42 18·32	9·877	+0·51	−16·61	2
11	13 58 58	+5 49·39	− 1 12·44	12	8 23 17·40	9·789*n*	129 14 56·96	0·428	+0·45	−16·60	3
11	15 45 12	+2 17·42	−10 1·17	13	8 23 48·70	9·683*n*	129 20 49·14	9·887	+0·41	−16·36	4

Mean Places of Comparison Stars for 1891·0.

✳	RA. 1891·0.	N.P.D. 1891·0.	Authority.
	h m s	° ′ ″	
1	8 8 24·45	126 39 43·76	St. 4204, Arg. Gen. Cat. 10931 and 10964 (1ᵐ in error).
2	8 10 0·19	126 37 16·94	Arg. Gen. Cat. 10980.
3	8 17 27·56	129 16 26·00	St. 4297, Arg. Gen. Cat. 11199.
4	8 21 30·87	129 31 6·67	Arg. Gen. Cat. 11311.

Sydney Observatory : 1891 *October* 19.